

Release Notes

DRIVER VERSION: 26.20.100.7000

DATE: August 1, 2019

HIGHLIGHTS:

- **Performance optimizations for DX11 titles.**

GAMING HIGHLIGHTS:

Get ready to experience [Metal Wolf Chaos XD*](#), a remastered version of the classic mech shooter on Intel® UHD Graphics 620 or better.

Experience the PC release of [Beyond: Two Souls*](#), take your experience to the next level with the [Final Fantasy XIV: Shadowbringers*](#) expansion pack and prepare yourself for [Age of Wonders: Planetfall](#) on Intel® Iris® Pro graphics or better.

Be sure to check out gameplay.intel.com, where you'll find recommended in-game settings for your Intel® Graphics system for many more of your favorite games.

Get a front row pass to gaming deals, contests, betas, and more with [Intel® Software Gaming Access](#).

DEVELOPER HIGHLIGHTS:

- Support for SPV_EXT_physical_storage_buffer extension.
- New Vulkan Extension VK_EXT_buffer_device address allows the application to query a 64-bit buffer device address for a buffer.
- Added OpenCL SPIR-V support to the public IntelGPUCompiler API on top of existing DX11 and DX12 support. IntelGPUCompiler API allows developers to compile their shaders into Intel GPU assembly instructions.
- Implemented the latest iteration of VK_KHR_swapchain (version 70) to allow binding memory from swap chain to raw images created by applications.

PERFORMANCE IMPROVEMENTS:

- Enabled Pixel Shader SIMD Profile-Guided Optimizations, selecting the best pixel shader compilation mode automatically, to boost performance in DX11 titles including [Overwatch*](#), [Paladins*](#) and [Hearthstone*](#).
- Performance optimizations for [Fortnite*](#) and other Unreal Engine 4-based titles.
- DirectML D3D12 MetaCommand performance optimizations for fp16 topologies.

KEY ISSUES FIXED:

NOTE: This driver contains stability and security improvements.

- Intermittent crashes or hangs may be observed in [Sniper Elite V2 Remastered*](#), [World War Z*](#) (Vulkan) (1080p Medium and High Settings), [Rage 2*](#) (Vulkan) and [They Are Billions*](#).

- Game crashes in [Apex Legends*](#) and [PlayerUnknown's Battlegrounds*](#) on 7th Gen Intel® Core platforms and newer when Alt+Tab keys are pressed during gameplay.
- SpecViewPerf13 crashes after launch on 8th Gen and 9th Gen Intel® Core platforms.
- Minor graphics anomalies may be observed in 3ds Max 2019, Creo 4/Creo 5 (OpenGL), NX 11/NX 12(OpenGL)
- Corruption on Direct3D 12 workloads that use placed resources.
- Color corruption observed when running 3DConnexion demo application.
- Fixed corruption issues in the Windows camera app on the following Gemini Lake processors: Intel® Pentium® Silver J5005 and N5000, and Intel® Celeron® J4005, J4105, N4100 and N4000.
- Fixed issue with resolution change when playing back Netflix content.
- Improved HDR support.
- Improved HDR support for OLED panels.
- Improved stability for Edge and Firefox browsers.

This document provides information about Intel® Graphics Driver for:

- 9th Generation Intel Core processors, related Pentium®/Celeron® processors, and Intel® Xeon® processors, with Intel UHD Graphics 630.
- 8th Generation Intel Core processors, related Pentium/ Celeron processors, and Intel Xeon processors, with Intel® Iris® Plus Graphics 655 and Intel UHD Graphics 610, 620, 630, P630.
- 7th Generation Intel Core processors, related Pentium/ Celeron processors, and Intel Xeon processors, with Intel Iris Plus Graphics 640, 650 and Intel HD Graphics 610, 615, 620, 630, P630.
- 6th Generation Intel Core, Intel Core M, and related Pentium processors, with Intel Iris Graphics 540, Intel Iris Graphics 550, Intel Iris Pro Graphics 580, and Intel HD Graphics 510, 515, 520, 530.
- Intel Xeon processor E3-1500M v5 family with Intel HD Graphics P530
- Pentium/ Celeron processors with Intel HD Graphics 500, 505 and Intel UHD Graphics 600, 605

CONTENTS OF THE PACKAGE:

- Intel Graphics Driver
- Intel® Audio Driver 10.26.0.8 (6th Gen and related Pentium Silver and Celeron processors)
- Intel Audio Driver 10.27.0.4 (7th, 8th, 9th Gen)
- Intel® Media SDK Runtime
- Intel® Graphics Compute Runtime for OpenCL™ Driver
- Intel® Graphics Command Center
- Vulkan* Runtime Installer (1.1.108.0)

OPERATING SYSTEM SUPPORT:

On 9th Generation Intel Core, 8th Generation Intel Core, 7th Generation Intel Core, and 6th Generation Intel Core processors, Intel Xeon processors for mobile workstations and related Pentium/Celeron processors:

- Microsoft Windows® 10-64 - Fall Creators Update (1709)
- Microsoft Windows 10-64 - April 2018 Update (1803)
- Microsoft Windows 10-64 - October 2018 Update (1809)
- Microsoft Windows 10-64 – May 2019 Update (1903)

KNOWN ISSUES:

- Intermittent crashes or hangs may be observed in **Madden NFL19***, **Stormworks: Build and Rescue*** and **Burnout Paradise Remastered**.
- Minor graphical anomalies may be observed in **Arma 3** and **Madden NFL20***.

SUPPORTED PRODUCTS:

HARDWARE

All platforms with the following configurations are supported:

Intel Graphics ¹	DirectX* ²	OpenGL*	OpenCL	Vulkan*	Intel® Quick Sync Video
9 th Generation Intel Core processors with Intel UHD Graphics 630	12	4.6	2.1	1.1.108	Yes
8 th Generation Intel Core processors with Intel Iris Plus Graphics 655	12	4.6	2.1	1.1.108	Yes
8 th Generation Intel Core processors with Intel UHD Graphics 610/620/630/P630	12	4.6	2.1	1.1.108	Yes
7 th Generation Intel Core processors with Intel Iris Plus Graphics 640/650	12	4.6	2.1	1.1.108	Yes
7 th Generation Intel Core processors with Intel HD Graphics 610/615/620/630	12	4.6	2.1	1.1.108	Yes
Intel Xeon processor E3-1500M v5 family with Intel HD Graphics P630	12	4.6	2.1	1.1.108	Yes
Pentium Processors with Intel HD Graphics 610	12	4.6	2.1	1.1.108	Yes
6 th Generation Intel Core processors with Intel Iris Pro Graphics 580	12	4.6	2.0	1.1.108	Yes
6 th Generation Intel Core processors with Intel Iris Graphics 540/550	12	4.6	2.0	1.1.108	Yes
6 th Generation Intel Core processors with Intel HD Graphics 520/530	12	4.6	2.0	1.1.108	Yes
Intel Xeon processor E3-1500M v5 family with Intel HD Graphics P530	12	4.6	2.0	1.1.108	Yes
Intel Xeon processor E3-1500M v5 family with Intel Iris Pro Graphics P580	12	4.6	2.0	1.1.108	Yes
Intel Core M processors with Intel HD Graphics 515	12	4.6	2.0	1.1.108	Yes
Pentium and Celeron processors with Intel HD Graphics 500/505/510	12	4.6	1.2	1.1.108	Yes
Pentium and Celeron processors with Intel UHD Graphics 600/605	12	4.6	1.2	1.1.108	Yes

Note:

1. If you are uncertain of which Intel processor is in your computer, Intel recommends using the [Intel® Processor Identification Utility](#) or Install the [Intel® Driver & Support Assistant](#) (previously called Intel® Driver Update Utility) to identify your Intel processor.
2. In the Intel Graphics Command Center (System > Driver), the 'Microsoft DirectX*' version refers to the operating system's DirectX version. The DirectX 12 API is supported but some optional features may not be available. Applications using the DirectX 12 API should query for feature support before using specific hardware features.

Please note that DirectX12 is only supported on Windows 10 and DirectX11.3 support is also available on supported Microsoft* operating systems.

3. Intel® Labs conducts independent testing of supported titles on Intel® platforms to ensure playability. Please refer to publisher system requirements to ensure compatibility with your system.

More on Intel Core Processors

For more information on the Intel Core processor family, Intel Xeon E processor family, and 9th Generation Intel Core processors, please visit:

[Intel 9th Generation Core Processors](#)

<http://www.intel.com/content/www/us/en/processors/core/core-processor-family.html>

<http://www.intel.com/content/www/us/en/processors/xeon/xeon-processor-e3-family.html>

<http://www.intel.com/graphics>

Work and play in high resolution with Intel UHD Graphics, Intel Iris Graphics, Intel Iris Plus Graphics, and Intel Iris Pro Graphics. Watch captivating 4K Ultra HD (UHD) video on up to three screens, edit photos and videos like a pro, and immerse yourself in vividly rendered, seamless 3D gameplay - all with the added power boost of an Intel Core processor. Intel Graphics bring stunning visuals to thinner and lighter portable devices, like laptops, 2 in 1s, and desktop computers.

We continuously strive to improve the quality of our products to better serve our users and appreciate [feedback](#) on any issues you discover and suggestions for future driver releases. If you have an issue to submit, **please follow the guidance found here** [Default level information for reporting Graphics issues](#).

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